

# GRAIN TRANSPORTATION REPORT

Transportation & Marketing, Agricultural Marketing Service United States Department of Agriculture

JULY 31, 2003

TM GRAIN TRANSPORT COST				<u>O</u>	<u>cean</u>
INDICATORS	<u>Truck</u>	<u>Rail</u>	<u>Barge</u>	Gulf	PNW
Indicator Value* for 07/31	97	151	84	146	160
Compared to Last Week	Unchanged	•	<b>1</b>	•	•
*Indicator: Base Year 2000=100; V	Weekly Updates i			•	

Market; Barge=Spot Illinois River Basis; Ocean Vessel based on Routes to Japan

Sept. 4-5	Truth or Consequences: The Future of Contracts in Agriculture	Kansas City, MO	Janie Hipp 479-575-2256 (ph) 479-575-5306 (fax)
Sept. 7-9	World Fertilizer Conference	Boston, MA	202-962-0490 (ph) 202-962-0577 (fax)
Sept. 10-12	Greater New Orleans Barge Fleeting Assoc. 2003 River & Marine Industry Seminar	New Orleans, LA	Alan Savoie 985-783-6605 (ph) www.gnobfar.com
Sept. 19-24	National Association of State Dept. of Agriculture (NASDA) Annual Meeting.	Boise, ID	Kelly Killen 208-332-8503 Robin Mason 208-332-8500
Sept. 10-12	Greater New Orleans Barge Fleeting Assoc. 2003 River & Marine Industry Seminar	New Orleans, LA	Alan Savoie 985-783-6605 (ph) www.gnobfar.com
Sept. 24-26	National Waterways Conference Annual Meeting	Houston, TX	202-296-4415 (ph) 202-835-3861
Sept. 28-Oct. 3	2003 American Association of Port Authorities (AAPA) Annual Convention	Curacao, Netherlands Antilles	703-684-5700 (ph) 703-684-6321 info@aapa.ports.org
Oct. 18-21	National Assoc. Of Wheat Growers (NAWG) Fall Board Meeting	Minneapolis, MN  wheatw	202-547-7800 (ph) 202-546-2638 (fax) vorld@wheatworld.org

Report is prepared by Deen Olowolayemo, Johnny Hill and Karl Hacker, Agricultural Economists, Transportation & Marketing, Agricultural Marketing Service, USDA (202) 690-1304. Support provided by Upper Great Plains Transportation Institute, North Dakota State University. This report can be found on the Internet at www.ams.usda.gov/tmd/grain.htm. E-mail comments and

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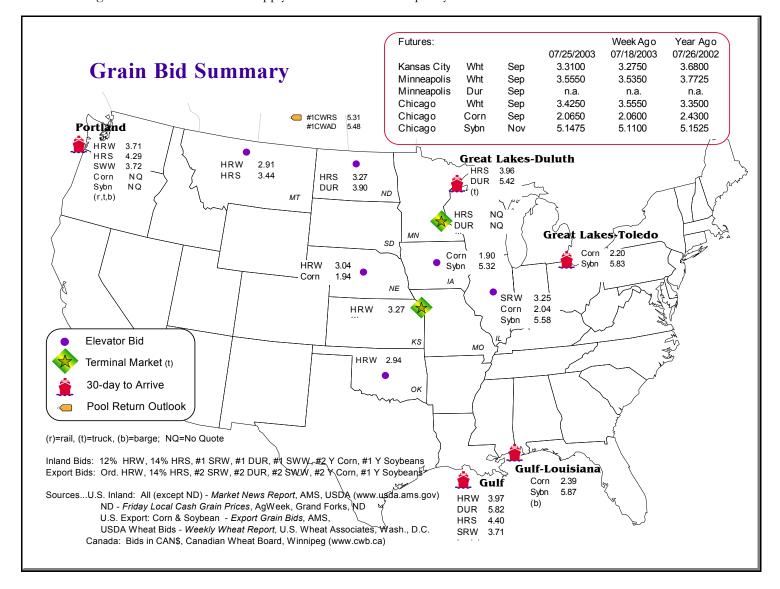
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The Grain Transportation Report is a weekly news source for grain logistics. Detailed data and trend information on five major modes: barge, truck, rail, container, and vessel, provide timely insight into grain transport. The report is offered to policymakers and industry as a tool in day-to-day decision making and longer-term strategic planning for an effective and efficient U.S. grain logistics system.

#### Market Update: U.S. Origins to Export Position Price Spreads (Per Bushel)

Commodity	OriginDestination	This week	<u>Last week</u>	
Corn	IL Gulf	-0.35	-0.37	
Corn	NE Gulf	-0.45	-0.50	
Soybean	IA Gulf	-0.55	-0.57	
HRW	KS Gulf	-0.70	-0.67	
HRS	ND Portland	-1.02	-1.03	

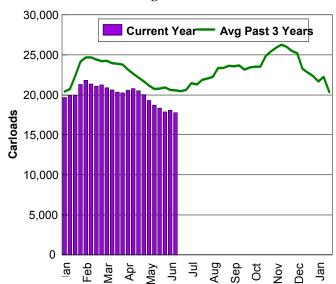
The **Grain Bid Summary** illustrates the market relationships for commodities. Positive and negative adjustments in differential between terminal and futures markets, and the relationship to inland market points, are indicators of changes in fundamental market supply and demand. The map may be used to monitor market and time differentials.



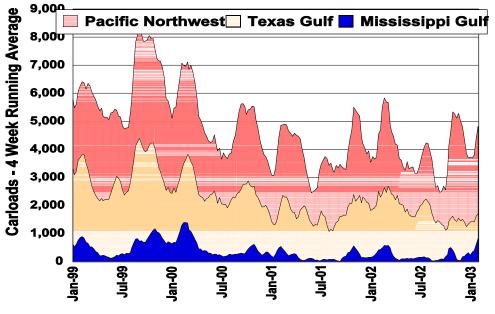
#### **RAIL TRANSPORTATION**

Rail Deliveries to Port (Carloads)					
	Mississippi Gulf*	Texas Gulf	Pacific Northwest	Atlantic & East Gulf	Total
Week Ending:					
07/09/03	126	1,371	1,876	152	3,525
07/16/03	90	1,514	2,271	119	3,994
YTD 2003	9,245	36,132	81,231	10,542	137,150
YTD 2002	7,083	54,553	56,311	13,615	131,562
% YTD 2002	131%	66%	144%	77%	104%
Total 2002	11,112	83,799	111,719	21,551	228,181
Total 2001	10,022	81,804	111,376	26,604	229,806
Source: Transport	ation & Marke	ting/AM	S/USDA; (*)	Incomplete Da	ta

#### **Grain Car Loadings for Class I Railroads**



## **Rail Deliveries to Port**



Railroads originate approximately 40% of U.S. grain shipments. Trends in these loadings are indicative of market conditions and expectations.

Class I Rail Carrier Grain Car Bulletin (Grain Carloads Originated and Grain Service Index)

	East		West		U.S. Total	Canada		
	CSXT	NS	BNSF	KCS	UP	U.S. Total	CN	CP
07/19/03	2,622	3,597	6,712	699	6,916	20,546	3,560	3,767
This Week Last Year	2,759	3,559	7,541	614	6,290	20,763	4,799	4,012
2003 YTD	79,993	93,188	206,903	10,663	186,333	577,080	97,808	99,691
2002 YTD	81,573	90,788	211,595	16,719	192,417	593,092	118,181	103,324
% of Last Year	98%	103%	98%	64%	97%	97%	83%	96%
2002 Total	142,760	164,745	400,179	27,161	344,296	1,079,141	191,835	195,765

<u>U.S. Rail Covered Hopper Cars Online Index</u>\*
June-03 94.1 96.1

Source: Association of American Railroads; \*Base Year = 2001, Index based on Number of Covered Hopper Cars Online (available for Service).

91.0

88.5

91.3

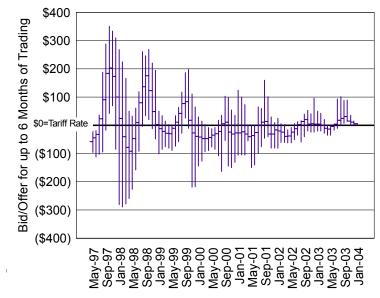
92.5

Rail service may be ordered directly from the railroad via **Auction** for guaranteed service or tariff for non-guaranteed service, or through the secondary market. The **Secondary Rail Market** information reflects trade values for service that was originally purchased from the railroad carrier as some form of guaranteed freight. The auction and secondary rail values are indicators of rail service quality and demand/supply.

Secondary Rail Car Market Average Premium/Discount to Tariff, \$/Car - Last Week							
	Delivery Period						
	Aug-03	Sep-03	Oct-03	Nov-03			
BNSF-GF	\$102	\$88	\$90	\$36			
UP-Pool	\$9	\$29	\$38	\$26			

Railroad Car 'Auction' Results  Average Premium/Discount to Tariff, \$/Car - Last Auction						
Delivery for:	Sep-03	Oct-03	Nov-03			
COT/N. Grain	sold out	\$66	\$42			
COT/S. Grain	\$46	\$0	\$0			
GCAS/Region 1	no bid	no bid	no bid			
GCAS/Region 2	\$1	no bid	\$2			
Source: Transportation & COT=Certificate of Trans	C		ocation System			

## Secondary Rail Market Bid



**Delivery Month-Year** 

#### **Tariff Rail Rates for Unit Train Shipments**

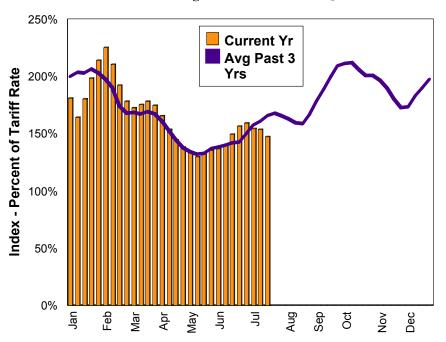
July 2003

Source: www.bnsf.com., approximate load per car = 100 tons: Corn 56 lbs/bu, Wheat & Soybeans 60 lbs/bu\*

Date	Tariff				Rate	Rate Per	Rate/Per
Effective	Item	Commodity	Origin	Destination	Per Car	MT	Bushel*
07/07/03	113710	Wheat	Kansas City, MO	Galveston, TX	\$1,720	\$18.96	\$0.52
07/07/03	43521	Wheat	Minneapolis, MN	Portland, OR	\$4,148	\$45.72	\$1.24
07/07/03	46540	Wheat	St. Louis, MO	Houston, TX	\$1,795	\$19.79	\$0.54
07/07/03	113710	Wheat	Kansas City, MO	Laredo, TX	\$2,180	\$24.03	\$0.65
07/07/03	15507	Wheat	Chicago, IL	Albany, NY	\$1,834	\$20.22	\$0.55
07/07/03	31005	Corn	Minneapolis, MN	Portland, OR	\$3,050	\$33.62	\$0.85
07/07/03	1132.002	Corn	Chicago, IL	Baton Rouge, LA	\$1,845	\$20.34	\$0.52
07/07/03	1132.03	Corn	Council Bluffs, IA	Baton Rouge, LA	\$1,970	\$21.72	\$0.55
07/07/03	113210	Corn	Evansville, IN	Raleigh, NC	\$1,686	\$18.58	\$0.47
07/07/03	1132	Corn	Des Moines, IA	Laredo, TX	\$2,595	\$28.60	\$0.73
07/07/03	61110	Soybean	Minneapolis, MN	Portland, OR	\$3,030	\$33.40	\$0.91
07/07/03	1144	Soybeans	Chicago, IL	Baton Rouge, LA	\$2,736	\$30.16	\$0.82
07/07/03	1144	Soybeans	Council Bluffs, IA	Baton Rouge, LA	\$2,799	\$30.85	\$0.84
07/07/03	1144	Soybeans	Des Moines, IA	Laredo, TX	\$2,864	\$31.57	\$0.86
07/07/03	11441	Soybeans	Evansville, IN	Raleigh, NC	\$1,686	\$18.58	\$0.51

#### **BARGE TRANSPORTATION**

#### Illinois River Barge Rate Index - Rate Quotes



The Illinois River Barge Rate Index averaged 183% of the Benchmark Tariff Rate between 1999 and 2001, based on weekly market quotes. The Index, along with Rate Quotes and Futures Market bids are indicators of grain transport supply and demand.

Calculating **Barge Rate** Per Ton: Index × 1976 Tariff Benchmark Rate per Ton

Select applicable index from market quotes included in tables on this page. The 1976 benchmark rates per ton are provided in map below.

BARGE RATE QUOTES: Southbound Barge Freight Index=Percent of Tariff, Based on 1976 Tariff Benchmark Rate						
	7/23/03	7/16/03	Aug '03	Oct '03		
Twin Cities	195	205	210	266		
Mid-Mississippi	158	165	174	249		
Illinois River	148	154	165	244		
St. Louis	109	110	153	210		
Lower Ohio	128	127	153	241		
Cairo-Memphis	105	105	145	201		
Source: Transportation	Source: Transportation & Marketing /AMS/USDA					

# BARGE FUTURES MARKET Southbound Barge Freight Nominal/Cash Basis Values Index=Percent of Tariff, Based on 1976 Tariff Benchmark Rate

		Contract	Ra	te
Week ended	River/Region	Period	Futures	Cash
7/29/03	St. Louis	Aug	n/a	145
		Oct	n/a	215
		Dec	n/a	140
		Feb	n/a	140
		Mar	n/a	140
	Illinois River	Aug	n/a	153
		Oct	n/a	248
		Dec	n/a	178
		Feb	n/a	185
		Mar	n/a	168

Source: St. Louis Merchants Exchange

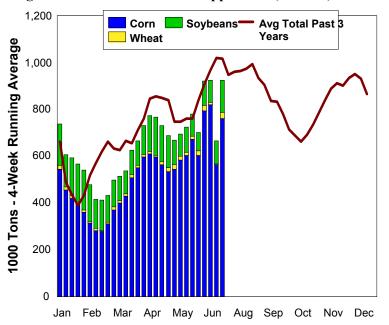
Barge Benchmark Tariff Rates
Est. 1976 - Tariff No. 7'

Barge Benchmark Tariff
Rates
St. Louis
3.99

Memphis 4.04
3.14

Greenville
2.29

#### Barge Movements on the Mississippi River (Lock 27)



	<u>Corn</u>	Wht	<b>Sybn</b>	<u>Total</u>
Mississippi River				
Rock Island, IL (L15)	408	8	66	482
Winfield, MO (L25)	568	12	112	695
Alton, IL (L26)	736	25	130	893
Granite City, IL (L27)	766	24	135	927
Illinois River (L8)	82	3	9	95
Ohio River (L52)	5	28	5	38
Arkansas River (L1)	0	60	0	60
2003 YTD	16,635	1,101	4,785	22,975
2002 YTD	20,182	1,297	5,977	28,430
% of 2002 YTD	82%	85%	80%	81%
Total 2001	31,878	2,679	10,616	47,091

## TRUCK TRANSPORTATION

Weekly U.S. Retail Road Diesel Price



The weekly **Diesel Price** provides a proxy for trends in U.S truck rates. Diesel fuel is a significant expense for truck grain movements, accounting for 37% of the estimated variable cost. **Crude Oil Price** is an indicator in future diesel price trends.

#### Weekly Brent Crude Price, Friday Close



Crude Oil Prices (07/29/03) US\$ per Barrel	This Week	<u>Last Week</u>	
Light Sweet Crude (NYMEX)	29.61	29.39	<b></b>
Brent Crude	28.11	28.02	<b></b>

Note: Light Sweet Crude is exchanged on the New York Mercantile Exchange. North Sea oil has a "benchmark" role in crude oil pricing. Brent crude, a blend of North Sea oils, is traded on the International Petroleum Exchange in London.

Source: www.eia.doe.gov; \*U.S. Refiner Crude Acquisition Cost, Composite Domestic & Import

# GRAIN EXPORTS

U.S. Export Balances	s (1,000 M	letric T	ons)						
				Wheat			Corn*	Soybean*	Total
	HRW	SRW	HRS	SW W	DUR	A11			
07/17/2003	2,019	486	1,221	574	147	4,446	6,092	6,357	16,895
This Week Year Ago	1,136	449	984	671	116	3,356	5,402	1,979	10,737
Commulative Exports-0	Crop Year								
03/04 YTD	1,164	317	633	379	111	2,604	35,086	27,771	65,461
02/03 YTD	1,195	421	653	395	138	2,802	41,667	27,914	72,383
01/02 Total	8,761	5,485	5,582	3,175	1,133	24,135	48,003	29,926	102,064
00/01 Total	9,314	4,445	5,775	5,156	1,130	25,819	47,734	27,567	101,120
99/00 Total	10,629	4,195	5,590	4,055	984	25,453	48,760	26,972	101,185
Source: Foreign Agricult	ural Servic	e YTD-Y	ear-to-I	Date (www	w.fas.usda	ı.gov)			

	Pac	cific Reg	ion	Mis	ssissippi (	<u>Gulf</u>	<u>T</u>	exas Gu	<u>f</u>	Port Region Tota		<u>.1</u>
	Wheat	Corn	Soybn	Wheat	Corn	Soybn	Wheat	Corn	Soybn	Pacific	Mississippi	Texas
07/24/03	140	217	9	159	685	79	173	0	0	365	923	173
2003 YTD	4,577	2,968	2,623	2,542	16,304	9,946	2,875	529	50	10,168	28,791	3,454
2002 YTD	4,691	2,559	1,400	3,294	22,092	10,090	3,654	177	327	8,650	35,477	4,158
% of 2002 YTD	98%	116%	187%	77%	74%	99%	79%	299%	15%	118%	81%	83%
2002 Total	10,007	5,877	1,639	6,829	34,991	17,996	6,971	468	468	17,523	59,816	7,906

# **U.S. Grain Inspected for Export**



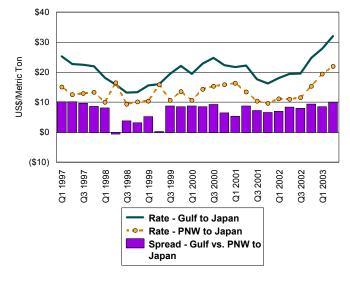
Select Canadian Port Export Inspections 1,000 Metric Tons, Week End Summary									
06/19/2003 Vancouver	Wheat	<u>Durum</u> 5	<u>Barley</u>						
Prince Rupert	100	J							
Prairie Direct Thunder Bay	5 18								
St. Lawrence	4,492	2,329	290						
2001/02 YTD	10,666	2,963	961						
2002/03 YTD	4,620	2,334	290						
% of Last Year	43%	79%	30%						
Source: Canadian Gr	ains Commis	sion, Crop Yea	ır 8/1-7/31						

Port Region Ocean Grain Vessels									
		Gulf		Pacific Northwest	Vancouver B.C.				
		Loaded	Due Next	t					
	In Port	7-Days	10-Days	In Port	In Port				
07/17/03	26	51	54	7	10				
07/24/03	29	47	64	11	7				
2002									
Range	(1555)	(3366)	(4482)	(315)	(012)				
2002 Avg	35	51	65	8	5				
Source: Trans	sportation &	& Marketii	ng /AMS/ l	USDA					

#### Gulf Port Region Grain Vessel Loading Past 7 Days



#### **Grain Vessel Rates to Japan**



<b>Quarterly</b> Average Ra				, U.S. Dollars	/Metric [	Гоп	
		2002 2 <sup>nd</sup> Qtr	% Change			2002 2 <sup>nd</sup> Qtr	% Chang e
Gulf to				Pacific NW	to		
Japan	\$31.53	\$19.43	62%	Japan	\$19.33	\$11.03	75%
Mexico	-	\$46.92	-				
N. Europe	\$18.98	\$13.58	40%	Argentina/I	Brazil to		
N. Africa	\$21.75	\$15.84	37%	Med. Sea	\$24.50	\$16.98	44%
Med. Sea	\$21.88	\$12.62	73%	N. Europe	-	\$17.16	-
				China	\$32.50	-	-

Source: Transportation & Marketing/AMS/USDA

Ocean Freight Rates for Selected Shipments - week ending 7/26/03								
Export Region	Import Region	Grain	Month	Volume Loaded (Tons)	Freight Rate (\$Ton)			
U.S. Gulf	Egypt	Wheat/Corn	Jul 21/31	55,000	\$24.50			
U.S. Gulf	Angola	Wheat	Aug 1/11	7,460	\$60.00*			
PNW	Bangladesh	Grains	Aug 1/10	23,750	\$119.88*			
PNW	Bangladesh	Grains	Aug 1/10	5,000	\$44.00			
U.S. Gulf	Japan	Heavy Grain	Jul 25/30	54,000	\$29.40			
River Plate	China	Heavy Grain	Jul 15/25	55,000	\$34.75			

Source: Maritime Research Inc.

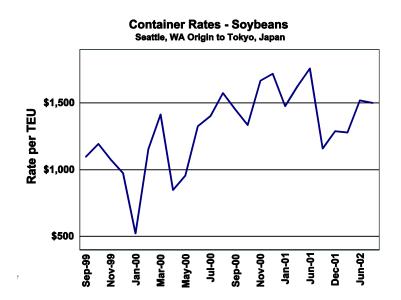
Rates shown are for metric ton (2,204.62 lbs.=one metric ton), F.O.B., except where otherwise indicated; op=option

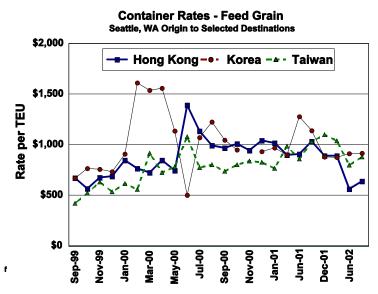
\*Most food aid from the United States is required to be shipped on U.S. flag vessels. The vessels are of limited availability resulting in higher rates. In addition, destinations receiving food aid generally lack adequate port unloading facilities, requiring the vessel to remain in port for a longer duration than normal.

## CONTAINER

#### **Container Ocean Freight Rates**

Average Rate per TEU, Weighed by Shipping Line Market Share Source: Transportation & Marketing/AMS/USDA, Quarterly Updates





Approximately 420,000 MT of grain and oilseed exports were marketed via container in 2001. This volume increased 26% compared to 1997.